CLAIMS

- 1. Composition packaged in an aerosol device comprising a liquid phase, which comprises, in a cosmetically acceptable medium, nanoparticles comprising at least 10% by weight of alumina and exhibiting a number-average primary size of between 2 and 200 nm, and a propellant chosen from dimethyl ether, C_{3-5} alkanes, 1,1-difluoroethane, mixtures of dimethyl ether and of C_{3-5} alkanes or mixtures of 1,1-difluoroethane and of dimethyl ether and/or of C_{3-5} alkanes.
- 2. Composition according to Claim 1, characterized in that the number-average primary size of the nanoparticles is between 5 and 50 nm.
- 3. Composition according to Claim 1 or 2, characterized in that the nanoparticles comprising at least 10% by weight of alumina additionally comprise a metal or semimetal oxide other than alumina.
- 4. Composition according to Claim 3, characterized in that the metal or semimetal oxide is chosen from silicon oxide or boron oxide.
- 5. Composition according to any one of the preceding claims, characterized in that the nanoparticles comprise at least 50% by weight of alumina.
- 6. Composition according to any one of the preceding claims, characterized in that the nanoparticles are formed of more than 90% by weight of alumina.

- 7. Composition according to any one of the preceding claims, characterized in that the alumina is an optionally hydrated alumina.
- 8. Composition according to Claim 7, characterized in that the alumina is boehmite.
- 9. Composition according to any one of the preceding claims, characterized in that the amount of the nanoparticles is between 0.01 and 30% by weight, preferably between 0.05 and 5% by weight, with respect to the total weight of the composition.
- 10. Composition according to any one of the preceding claims, characterized in that propellant is composed of dimethyl ether, alone or as a mixture.
- 11. Composition according to any one of the preceding claims, characterized in that the propellant is present in an amount of between 2 and 90% by weight, preferably between 40 and 80% by weight, with respect to the total weight of the composition.
- 12. Composition according to any one of the preceding claims, characterized in that the cosmetically acceptable medium comprises water and/or a cosmetically acceptable solvent.
- 13. Composition according to Claim 12, characterized in that the solvent is chosen from lower C_1 - C_4 alcohols, polyols, polyol ethers, acetone, and their mixtures.
- 14. Composition according to Claim 13, characterized in that the solvent is ethanol.

- 15. Composition according to Claim 12, characterized in that the water represents less than 20% by weight of the composition.
- 16. Composition according to any one of the preceding claims, characterized in that the liquid phase additionally comprises conventional cosmetic additives chosen from adhesive agents, reducing agents, such as thiols, fatty substances, thickening softeners, antifoaming agents, screening agents, antiperspirants, acidifying agents, basifying agents, dyes, pigments, fragrances, preservatives, surfactants, fixing or nonfixing polymers, volatile or nonvolatile silicones, vegetable, animal or mineral oils, proteins and vitamins, and their mixtures.
- 17. Composition according to Claim 16, characterized in that it comprises a vinyllactam homopolymer or copolymer.
- 18. Process for the cosmetic treatment of the hair, characterized in that the composition according to any one of the preceding claims is applied to the hair and in that rinsing is or is not carried out, after an optional setting time.
- 19. Use of the composition according to any one of Claims 1 to 17, sprayed from the aerosol device, as styling product, preferably leave-in styling product.